

FIBER SPLICE TRAY FOR USE IN OPTICAL FIBER HYDROPHONE ARRAY

Abstract

A fiber splice tray for connecting optical fibers between hydrophone modules, allowing each module to be independently assembled. The tray houses the optical fiber in a small space envelope, and allows positioning of a spliced fiber along a straight portion of an internal groove. The internal groove has alternate paths for housing the fiber. The internal groove comprises two opposing parallel sections and two arcs at both ends of the parallel sections, making two continuous looped alternative fiber paths. The internal groove may further comprise two sections that are alternatives to the parallel sections and that cross each other in the middle of the tray. The various alternative fiber paths make it possible to position a splinted optical fiber splice or splice sleeve, which cannot tolerate a bend in the path, in a straight section of the groove.